

JUL 10 2007

PATENT APPLICATION
DOCKET NO.: 200315309-1

LISTING OF THE CLAIMS

Pursuant to 37 C.F.R. §1.121, provided below is a listing of the pending claims.

1. (Currently Amended) A printed circuit board (PCB) substrate, comprising:

a first dielectric material associated with a first current return layer;

a second dielectric material associated with a second current return layer;

a signal path layer interposed between said first dielectric material and said second dielectric material; and

an adhesive layer interposed between said first dielectric material and said second dielectric material, said adhesive layer being substantially coplanar relative to said signal path layer,

wherein said adhesive layer has a lower loss tangent than at least one of said first and second dielectric materials, said adhesive layer comprising a material operable to substantially reduce attenuation due to an electrical flux coupling effect between a pair of signal traces disposed in said signal path layer.

PATENT APPLICATION
DOCKET NO.: 200315309-1

Claims 2, 3. (Canceled)

4. (Previously Presented) The PCB substrate as recited in claim 1, wherein said adhesive layer has a higher glass transition point (T_g) than said first dielectric material.

Claims 5-7. (Canceled)

8. (Previously Presented) The PCB substrate as recited in claim 1, wherein said first dielectric material comprises a material selected from the group consisting of FR-4 material, pre-preg material, core material, and B-stage substrate material.

Claims 9-15. (Canceled)

PATENT APPLICATION
DOCKET NO.: 200315309-1

16. (Currently Amended) A method for constructing a printed circuit board (PCB) substrate, comprising:

providing a first dielectric material associated with a first current return layer;

providing a second dielectric material associated with a second current return layer;

providing a signal path layer interposed between said first dielectric material and said second dielectric material;

selecting an adhesive layer having a lower loss tangent than at least one of said first and second dielectric materials; and

providing said adhesive layer interposed between said first dielectric material and said second dielectric material, said adhesive layer being substantially coplanar relative to said signal path layer, wherein said adhesive layer operates to substantially reduce attenuation due to an electrical flux coupling effect between a pair of signal traces disposed in said signal path layer.

BEST AVAILABLE COPY

RECEIVED
CENTRAL FAX CENTER

JUL 10 2007

PATENT APPLICATION
DOCKET NO.: 200315309-1

Claims 17, 18. (Canceled)

19. (Previously Presented) The method as recited in claim 16, further comprising selecting said adhesive layer to include a material having a higher glass transition point (T_g) than said first dielectric material.

20. (Previously Presented) The method as recited in claim 16, further comprising curing a layer of said PCB substrate, said layer selected from the group consisting of said first dielectric material, said second dielectric material, and said adhesive layer.

Claims 21-25. (Canceled)

PATENT APPLICATION
DOCKET NO.: 200315309-1

26. (Previously Presented) The method as recited in claim 16, wherein said adhesive layer selected comprises a two-sided adhesive tape.

27. (Previously Presented) The method as recited in claim 16, wherein said adhesive layer selected comprises an adhesive film having a copper foil.

28. (Previously Presented) The method as recited in claim 16, wherein said adhesive layer selected comprises an epoxy adhesive sheet containing a glass-based adhesive that provides a low loss tangent, thin form factor and a glass transition temperature higher than said first dielectric material.

29. (Previously Presented) The method as recited in claim 16, wherein said adhesive layer selected comprises an expanded polytetrafluoroethylene (ePTFE).

PATENT APPLICATION
DOCKET NO.: 200315309-1

30. (Previously Presented) The method as recited in claim 16, wherein said adhesive layer selected has a loss tangent of about 0.0036 or less.

31. (Previously Presented) The PCB substrate as recited in claim 1, wherein said adhesive layer comprises a two-sided adhesive tape.

32. (Previously Presented) The PCB substrate as recited in claim 1, wherein said adhesive layer comprises an adhesive film having a copper foil.

33. (Previously Presented) The PCB substrate as recited in claim 1, wherein said adhesive layer comprises an epoxy adhesive sheet containing a glass-based adhesive that provides a low loss tangent, thin form factor and a glass transition temperature higher than said first dielectric material.

PATENT APPLICATION
DOCKET NO.: 200315309-1

34. (Previously Presented) The PCB substrate as recited in claim 1, wherein said adhesive layer comprises an expanded polytetrafluoroethylene (ePTFE).

35. (Previously Presented) The PCB substrate as recited in claim 1, wherein said adhesive layer has a loss tangent of about 0.0036 or less.